

Graduate School

Guidelines for a Thesis Incorporating Publications

A. Summary

SCU encourages HDR candidates to publish from their research during their HDR candidature. Incorporating manuscripts and publications into the HDR thesis is acceptable and indeed is becoming the preferred model in many disciplines. Candidates should use this format if they have any publications that overlap with the content of any chapter of their thesis, as it will help to avoid the risk of self-plagiarism. However, it is not necessary to have all research chapters published prior to thesis submission in order to use this model. Publications that were generated prior to candidature cannot be included in the thesis. Published work that is ancillary to the thesis can be included in appendices, if appropriate, and listed in the preliminary thesis section on "Publications during candidature". The list of publications should clearly cross-reference the relevant thesis Chapter or appendix where the work is included and all publications included in the main body must be accompanied by a "Statement of Authorship" (refer to Section E Appendix).

A thesis *incorporating* publications is more than just a collection of paper (i.e. a thesis *by* publication). A thesis must be a single body of work that, by definition, provides a coherent argument. This means the argument must be introduced and concluded, and the chapters between must be structured in a logical order, clearly linked together and formatted consistently throughout the thesis. In summary, refereed publications can be included in HDR theses provided that:

- i) The thesis comprises a collection of published papers that are prefaced, introduced, linked, discussed and concluded in the manner outlined in section D (below); OR
- ii) The thesis includes one or more manuscripts or publications, along with unpublished material, that are prefaced, introduced, linked, discussed and concluded in the manner outlined in section D (below).

In the following guidelines the term 'publication' refers to either (i) published refereed material, or (ii) material accepted for publication by a refereed journal (i.e. manuscripts 'in press'). Material submitted for refereed publication ('under review') or prepared for submission to a journal ('in preparation'), can be included as standalone chapters in the thesis, and should similarly be accompanied by statements of co-authorship where relevant, but these should not be presented as "publications" or published chapters referring to the title of the target journal, in case the paper is not subsequently accepted. Most importantly, the preparation and incorporation of publications, while encouraged, should not prevent or delay submission of the thesis for examination within the maximum degree period.

B. Background – advantages of incorporating publications into HDR theses

Southern Cross University supports postgraduate research students to publish their research during candidature. It demonstrates to examiners that the student's work has been peer reviewed and that the research is deemed worthy of publication. It also maintains currency of the candidate's work as it is completed and, for students wishing to do postdoctoral work, having a publication record is essential. In the past, most students have chosen to focus on writing the thesis and have found publications a distraction from that major task. More recently, given the pressures to publish, it has become increasingly common, particularly in scientific disciplines, to incorporate manuscripts into the thesis as a series of standalone chapters, with a connecting introduction and conclusion.

The advantages of this approach include:

- working towards publication can produce a more focused and concise thesis;
- it allows the candidate to engage with the broader academic community in a way that validates and confirms their work along the way;
- the candidate can improve their thesis substantially from incorporating referees' comments;
- the standards and expectations of published work are well established within disciplines, giving confidence that the candidate's work is of high quality (if published in a reputable journal);
- the candidate will be competitive for postdoctoral fellowships and employment at the time of graduation with an established track record in publication;
- publication deadlines can contribute to a rigorous thesis milestone plan;
- it allows the candidate to develop the ability to accept critical comment and disseminate findings;
- some components of the thesis will be easier to defend from adverse examiners' reports if independent reviewers have accepted the research as worthy of publication;
- it partially resolves the conflict between preparing the thesis for examination and preparing papers for publication;
- it gives the candidate the opportunity to co-author papers with other academics, and
- it increases the opportunity for the candidate to present work at conferences.

However, there are also some pitfalls and challenges that need careful consideration, to ensure that the thesis is the candidates own work body of work, whilst giving due acknowledgement to the work of coauthors. The following guidelines have been developed to minimize the risks of incorporating publications into the thesis and to ensure that a thesis incorporating publications is of high quality. It is important that candidates understand that any papers published prior to submission of the thesis, that includes ideas, data, text or other work that overlaps with content in their thesis, must be correctly cited to avoid self-plagiarism. With this is mind, it can be easier to clearly identify the publication in the thesis preface and at the start of the chapter (refer to section D), to reduce the need for paraphrasing or quoting of a student's own published text. In other chapters of the thesis, one's own published work should be referenced in the same way that the work of another scholar. Candidates must also remember to include their own publications (i.e. that form a chapter in the thesis) in the reference list at the end of the thesis.

It can be useful to establish from the outset of candidature whether you will use this format as it will influence how you and your supervisory team organise your timelines and milestones. However, if a traditional thesis was originally planned, but then one or more papers are published prior to submission, the candidate must switch to the thesis incorporating publication format to prevent problems relating to self-plagiarism.

C. Including publications

The following points provide guidance for including publications in HDR theses.

- To be identified as a publication in the thesis, the paper must have been published or accepted for publication. Evidence of publication status if not yet published should be included in an appendix. Manuscripts that are in preparation, submitted or in review can be included but should not be identified as a publication with the name of the target journal.
- The full reference details for all included publications must be provided in the list of publications at the start of the thesis (refer to section D), at the start of the relevant chapter and in the thesis reference list.
- The candidate can be the sole or joint author, but it is expected that the candidate is the primary author of papers included in a thesis, to ensure that the research and written work is substantially the candidates own.
- Clear statements of authorship must be signed and included in the thesis (see Section E, Appendix). A general statement signed by the principal supervisor and candidate should be included in the thesis preliminary pages and full statements signed by each co-author should appear in the appendices. These statements of authorship should explain the contribution from the candidate and give full acknowledgement to the contributions of others. It is generally expected that the candidate was at least involved in data collection and/or interpretation, and prepared the first draft of the manuscript. Candidates should seek guidance from their advisors and co-authors when preparing this statement.
- Publications included in the thesis should be formatted consistently and should not
 use the journal formatting. The publication reprint should not be included directly in
 the thesis, or the appendices, without copyright permission from the publisher. A
 hyperlink to the publication may be included in the appendices.
- There are no specifications for the number of publications that should be included in an HDR thesis. However the amount of research presented in a thesis incorporating publications is equivalent to expectations for research presented in a conventional thesis. In most disciplines, as a rough guide a *minimum* of two (Masters by Research) or three to four (Ph.D.) data intensive, publishable chapters could be expected.
- It is expected that candidates target well respected, high quality peer-reviewed journals for publications. It may also be appropriate to include refereed book chapters or conference proceedings, but this is less likely to impress examiners. This may depend on the discipline, so candidates should be guided by supervisors, Directors of Higher Degree by Research Training and/or liaison librarians on journal selection.
- Candidates must include an introductory chapter, which presents the overall aims, focus and scope of the thesis and addresses how the individual publications/chapters link to the theory and methodology adopted.

- The thesis must include a general discussion chapter that synthesizes the outcomes across all included publications and other data chapters, and evaluates the contribution that the research thesis as a whole makes to the advancement of the field.
- It is best to choose the format that tells the academic argument in the most coherent
 way, so that the content of the thesis is established as a substantial and significant body of
 work, but without unnecessary repetition. Nevertheless, there may be some unavoidable
 repetition of general background and specific methods in a thesis incorporating
 publication, as each paper must also stand alone. This is acceptable (so long as selfplagiarism is avoided) and can be explained upfront as part of the thesis overview and
 structure (e.g. in the general introductory chapter).
- Candidates may include relevant appendices that contain additional papers
 authored by the candidate but outside the scope of the thesis, as well as more
 detailed information required to support the publications and data chapters,
 including ethics approvals, questionnaires, pilot studies, detailed method
 development or optimisation, programming, raw data, quality control, statistical
 analyses and other material, as deemed appropriate for the specific discipline.
- If modifications are required to a published paper incorporated in the thesis (e.g. to correct a mistake or address examiners comments) these changes from the published version should be explained as an addendum on the cover page for the relevant chapter, after the full publication reference.
- The candidate is sole author and therefore copyright holder of the thesis and must take full responsible for everything contained in it.
- Examiners will be made aware that the Southern Cross University allows theses to be presented in different formats and encourages theses incorporating publications.

D. Thesis Format Guide

The following points provide guidance for structuring the thesis.

- Title page.
- Thesis declaration.
- **Abstract.** Ideally, no more than 400 words.
- **Acknowledgements**: as well as acknowledging supervisors, technicians, participants and other resource people and peers who have assisted the research, also acknowledge journal reviewers and editors whose comments have assisted the writing of papers.
- List of publications included as part of the thesis: include full citation details; statement that papers have been refereed (if the journal is not well known within the discipline evidence should be included in an appendix); and statement that copyright permission has been obtained if relevant (refer to Section E Appendix 4). Full publication details/citations for all publications included in the thesis are required both here in the preface and again at the beginning of each relevant chapter. Where publication is forthcoming (i.e., in press), include the digital identifier link to online early publications, or the letter of acceptance should be provided in an appendix. All published or

forthcoming work that appears in the thesis must also be included in the thesis reference list.

- Statement of contribution of others: The purpose of this statement is to summarise and clearly identify the nature and extent of the intellectual input by the candidate and any co-authors. It is expected that the student would have made a significant and leading contribution to any published works that are included into a thesis incorporating publication. The statement must be signed by the candidate and the principal supervisor (see Appendix 2 below for a brief example). A written statement signed by each of the co-authors detailing their contributions to the publication should be included as an appendix in the thesis (see Appendix 3 below).
- List of additional publications by the candidate relevant to the thesis but not included in it (including conference papers).
- **Table of contents,** List of Tables and Figures, and if relevant Abbreviations used in the thesis.
- Introduction/overview: The Introduction must establish the significance of the problem that is investigated and provide a coherent and logical framework for the research. It should contain succinct statements describing the research problem, overall aims and specific objectives of the study. It should explain the design of the research project and the structure of the thesis, including how any published chapters are linked to address the overall aim. This is important to provide continuity for the reader. Any publications used in the body of the thesis must be placed in the context of current knowledge in the appropriate field of study and in the context of the thesis as a whole. The order in which published chapters appear in the thesis does not have to be chronological, but rather should be placed to ensure the content builds on the previous work, as the reader's progress through the thesis.

The introduction should be the candidates own work, be of a very high standard and not have been submitted for publication. The overall aims of the thesis should be presented at the end of the introduction. It is also recommended that a short section outlining the structure of the thesis, which includes the objectives and publication status for each chapter, be included at the end of the general introduction section.

• Literature Review: If the published papers/individual data chapters include a comprehensive coverage of the relevant literature, a short section within the introduction chapter which overviews (and references) key ideas from the literature will be sufficient. If the published papers together provide a more limited or piece-meal literature review (perhaps because of journal page limits), then a more substantial literature review will be required to demonstrate broad knowledge of the field. In some cases the literature review may be published and in those cases it should be included as a chapter separate from the general introductory chapter.

- Methodology. If the published papers/individual data chapters in the thesis include a comprehensive coverage of the methodology, a short section (with references) within the general introduction chapter may be sufficient to provide an overview of the research approach. However, if the published papers together provide a more limited coverage of the methods (again because of journal page limits), and/or it is necessary to critically analyze different methods to justify the approach used in the thesis, then a more substantial methodology chapter may be required this requirement may vary between disciplines.
- Thesis chapters. These may consist of published papers (with correct self-citation to avoid self- plagiarism) and/or other data chapters prepared in manuscript format. Published papers can and should be included as separate chapters within a thesis. Direct reprints from journals should not be included, but rather it is strongly recommended that published papers are reproduced in the same format as the rest of the thesis. The subsections, figure and table numbers, for example, should be consecutive throughout the thesis (starting with relevant Chapter number) to align with those in other chapters. It may be necessary to include a brief introduction to each chapter that positions the paper within the overall argument of the thesis. If this has already been described well in the structure of the thesis section of the general introduction, and there is a logical flow from the preceding chapter, a statement or cover page detailing the chapter title and publication details could suffice.
- Discussion/Conclusion/Synthesis: This section should integrate and synthesise the significant findings of the thesis within the broader context of the literature. Depending on the discipline, it may also identify the limitations of the research and highlight future directions for research and/or practice. This section should not include a detailed reworking of the discussions from individual papers within the thesis, but rather must build on what has already been said within each chapter by drawing on information across individual chapters to provide multiple lines of evidence, or a provide a broader perspective. The final conclusion should demonstrate how the thesis has met the original aims of the study that were set out in the general introduction, again noting the need to address broader thesis aims rather repeat aims and conclusions from individual chapters. Generally this chapter should not have been submitted for publication.
- References: This should be a list of all references cited in all chapters and papers
 included in the thesis as well as from the general introduction and Literature Review,
 including your own publications. (NB it is not acceptable to spread reference sections
 across disparate chapters.)
- Appendices: These should include signed authorship statements from all co-authors (see Appendix 3 below), and where relevant, evidence supporting refereed status of publications such as conference papers, and documentation of acceptance of papers which have not yet appeared in print. Co-authorship statements are best obtained at the point of submission for journal publication when the extent of the author contributions are clear.

Appendices can also include further detailed data and methods descriptions not included in published chapters.

Statements regarding copyright permission sought for any third-party material or published work should also be included in the thesis appendix (refer to Section E, Appendix 4).

E. Appendices to the Guidelines for incorporating publications in HDR theses.

1. Examples of a thesis incorporating publication. Refer to the SCU digital thesis library https://epubs.scu.edu.au/theses/

<u>Victoria Y. Martin. Southern Cross University</u> (2016). Thesis topic: *Science engagement from the audiences perspective: can participatory marine science communication increase public engagement in science?* https://epubs.scu.edu.au/theses/516/

Kirin Therese Apps (2018). More than an adrenaline rush: A study of white shark cage-dive participants in Australia and the potential to encourage a conservation ethic. Southern Cross University. https://epubs.scu.edu.au/theses/609/

Arun Looman (2018). Aquatic carbon cycling from the headwaters to the seas in Eastern Australia. Southern Cross University https://epubs.scu.edu.au/theses/617/

Alejandro Jose Tagliafico Guzman (2018). *Improving coal aquaculture for reef conservation and the aquarium trade*. Southern Cross University https://epubs.scu.edu.au/theses/605/

Tarek Belkasm Ahmad (2017). In vitro and in vivo anti-inflammatory activity of extracts from a marine mollusk. Southern Cross University. https://epubs.scu.edu.au/theses/590/

Tomas Robert Davis (2017). *Improving conservation planning for subtidal estuarine biodiversity*. Southern Cross University. https://epubs.scu.edu.au/theses/561/

2. An example author statement to include in the preface

Statement of contribution of others

The Statements of Contribution signed by co-authors can be found in Appendix #.

Chapter

The candidate (XX) participated during all stages of the development of this paper and provided an overall contribution greater than that of any co-author. XX designed the experiments, collected the data, ran the analyses, and wrote the first draft of the manuscript which was revised with feedback from the co-authors.

Signed: Candidate
Signed: Principle supervisor

3. Statement of Co authorship: Example template for inclusion in the appendix

The following people and institutions contributed to the publication of work undertaken as part of this thesis:

Author 1 (Candidate)	Name and Faculty
Author 2	Name and institution, supervisor (if applicable)
Author 3	Name and institution
Author 4	Name and institution
Author 5	Name and institution, supervisor (if applicable)
etc	

Authorship details

Paper 1 < reference > Located in Chapter X

Candidate contribution: e.g. The Candidate was the primary author and with author 2 and author 5 contributed to the conception and design of the research project. They collected the data, were primarily responsible for the data analysis with guidance from authors 2, 3 and 5 and prepared the first draft of the manuscript. Overall, the Candidate contributed approximately 60% to the planning, execution and preparation of the work for the paper.

Author 2: e.g. contributed to the project planning and supervised the analysis of... and edited the manuscript

Author 3: e.g. provided sampled of ... and contributed to the interpretation of... and edited the manuscript

Author 4: e.g developed the method for ... and assisted the candidate to...

Author 5: e.g. contributed to the project design, supervised the candidates collection and analysis of data, assisted with interpretation and redrafted sections of the manuscript for publication.

We the undersigned agree with the above stated "proportion of work undertaken" for each of the above published (or submitted) peer-reviewed manuscripts contributing to this thesis:

	•	•	 •	_
this thesis:				

Author 2

Signed Candidate Author 1

Author 3

Author 4

Author 5

4. Copyright statements

If the thesis contains third-party material (for example photographs, maps, figures), the source must be duly acknowledged in the thesis for examination. However, for subsequent publication of the thesis (e.g. on epubs in the SCU digital thesis library), permission must be obtained to reproduce this material, including copyright on third-party material that has been assigned to a publisher. This includes and figures or tables reproduced from the candidates own publications that are incorporated in the thesis. Copyright statements should be included in a thesis appendix.

For example: "I warrant that I have obtained, where necessary, permission from the copyright owners to use any third-party copyright material reproduced in the thesis (e.g. questionnaires, artwork, unpublished letters, photographs, data figures), or to use any of my own published work (e.g. journal articles) in which the copyright is held by another party (e.g. publisher, co-author)."